FIG.1

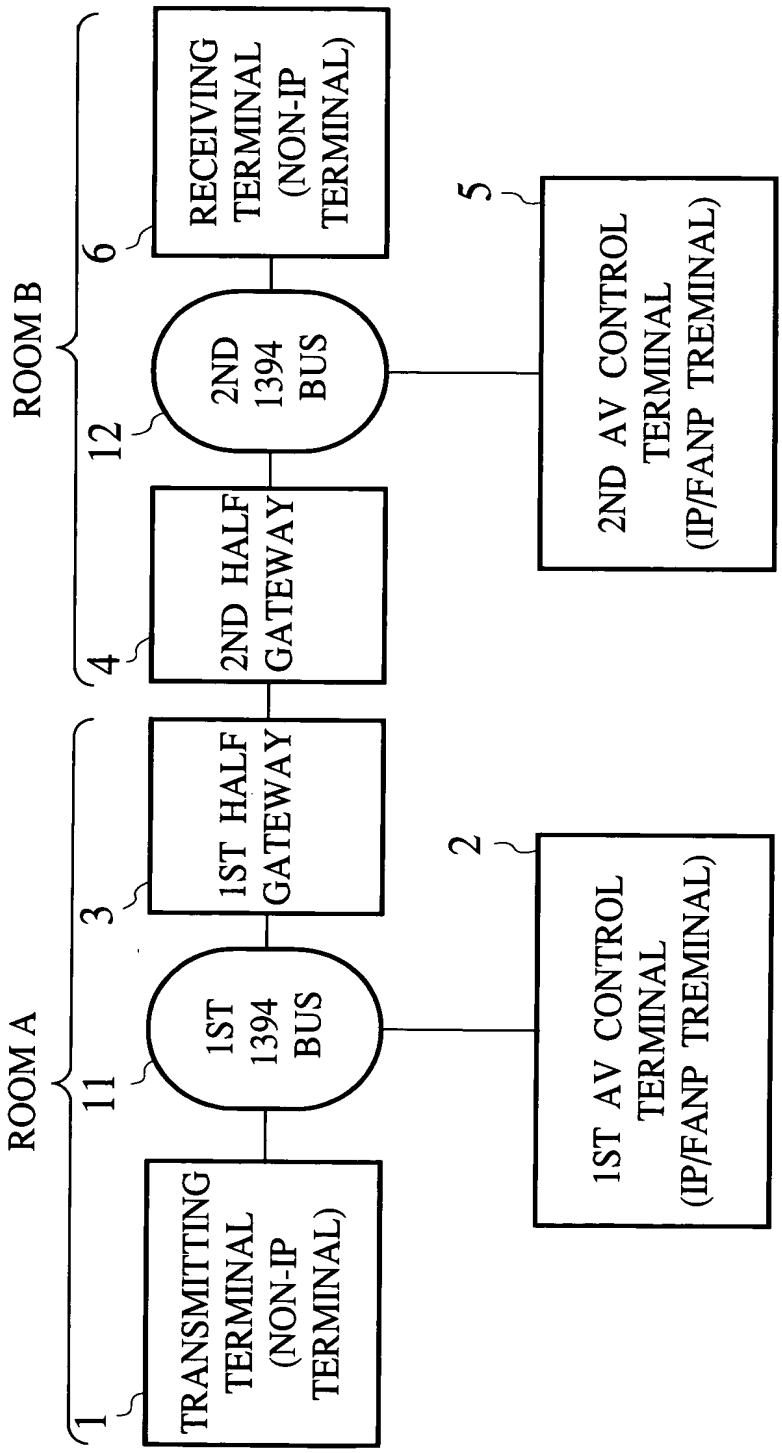

FIG.2

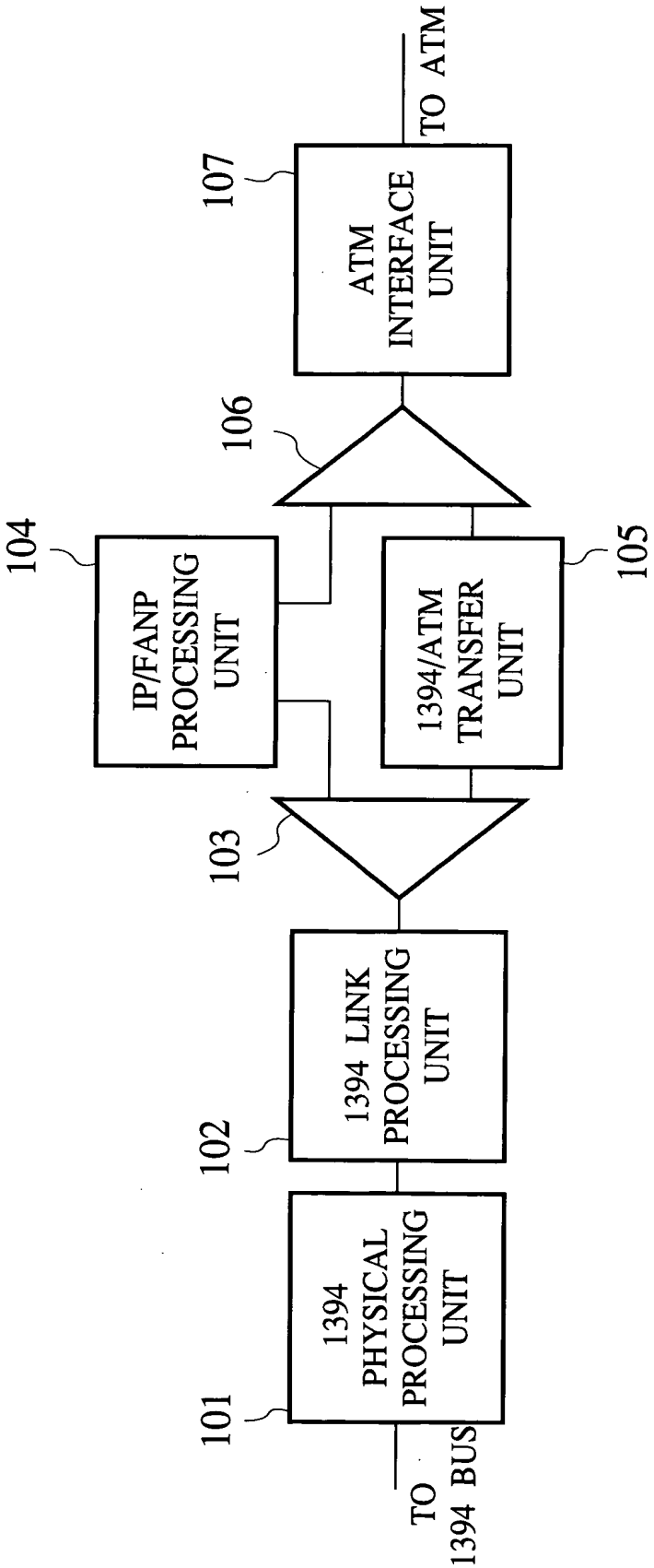
TO ATM
107
ATM INTERFACE UNIT
106
104
IP/FANP PROCESSING UNIT
1394/ATM TRANSFER UNIT
105
103
102
1394 LINK PROCESSING UNIT
101
1394 PHYSICAL PROCESSING UNIT
TO 1394 BUS

FIG.3

1394 SIDE INPUT CHANNEL NO. OR 1394 DESTINATION ADDRESS INCLUDING REGISTER OFFSET VALUE	ATTRIBUTE	OUTPUT PORT	ATM OUTPUT VPI/VCI
#1	MPEG, 4M	B	#A
#4	AUDIO, 1M	B	#B

FIG.4

ATM INPUT VPI/VCI	ATTRIBUTE	OUTPUT PORT	1394 SIDE OUTPUT CHANNEL NO. OR 1394 DESTINATION ADDRESS INCLUDING REGISTER OFFSET VALUE
#A	MPEG, 4M	B	#1
#B	AUDIO, 1M	B	#3

FIG.5

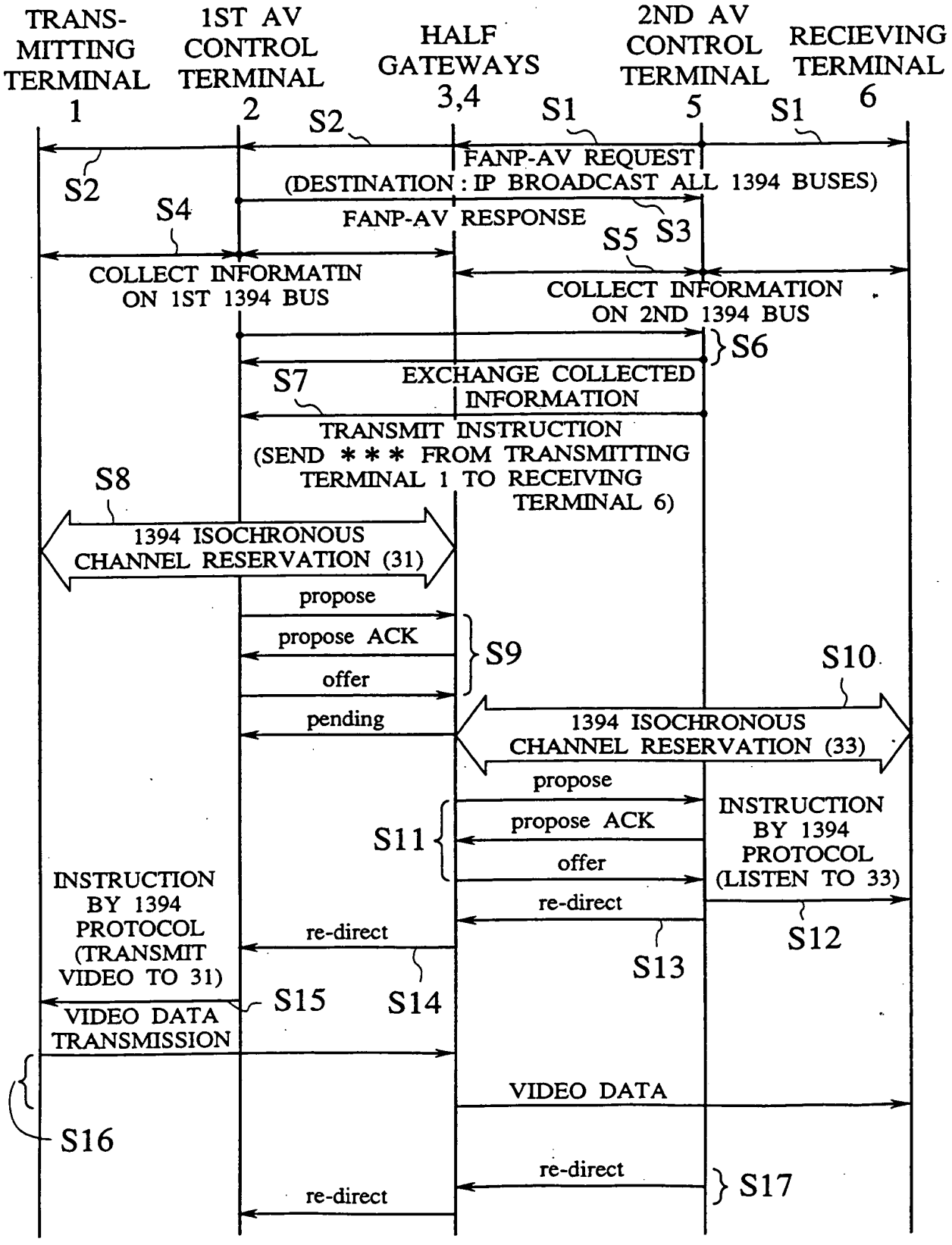
TRANS-MITTING TERMINAL 1
1ST AV CONTROL TERMINAL 2
HALF GATEWAYS 3,4
2ND AV CONTROL TERMINAL 5
RECIEVING TERMINAL 6
S1
S2
FANP-AV REQUEST
(DESTINATION : IP BROADCAST ALL 1394 BUSES)
FANP-AV RESPONSE
S3
S4
S5
COLLECT INFORMATIN ON 1ST 1394 BUS
COLLECT INFORMATION ON 2ND 1394 BUS
S6
S7
EXCHANGE COLLECTED INFORMATION
TRANSMIT INSTRUCTION (SEND * * * FROM TRANSMITTING TERMINAL 1 TO RECEIVING TERMINAL 6)
S8
1394 ISOCHRONOUS CHANNEL RESERVATION (31)
propose
propose ACK
offer
pending
S9
S10
1394 ISOCHRONOUS CHANNEL RESERVATION (33)
propose
propose ACK
offer
S11
INSTRUCTION BY 1394 PROTOCOL (LISTEN TO 33)
re-direct
S12
S13
INSTRUCTION BY 1394 PROTOCOL (TRANSMIT VIDEO TO 31)
re-direct
S14
S15
VIDEO DATA TRANSMISSION
VIDEO DATA
S16
re-direct
re-direct
S17

FIG.6

IP ADRESSES OF OTHER AV CONTROL TERMINALS	ATTRIBUTE INFORMATION FOR DATA/AV DEVICES UNDER CONTROL OF THIS AV CONTROL TERMINAL		
	NETWORK TYPE	ADDRESS	ATTRIBUTE
IP ADRESSES OF 1ST AV CONTROL TERMINAL	1394	1394 ADDRESS OF TRANSMITTING TERMINAL 1	DVD PLAYER
⋮	⋮	⋮	⋮
IP ADRESSES OF 3RD AV CONTROL TERMINAL			

FIG.7

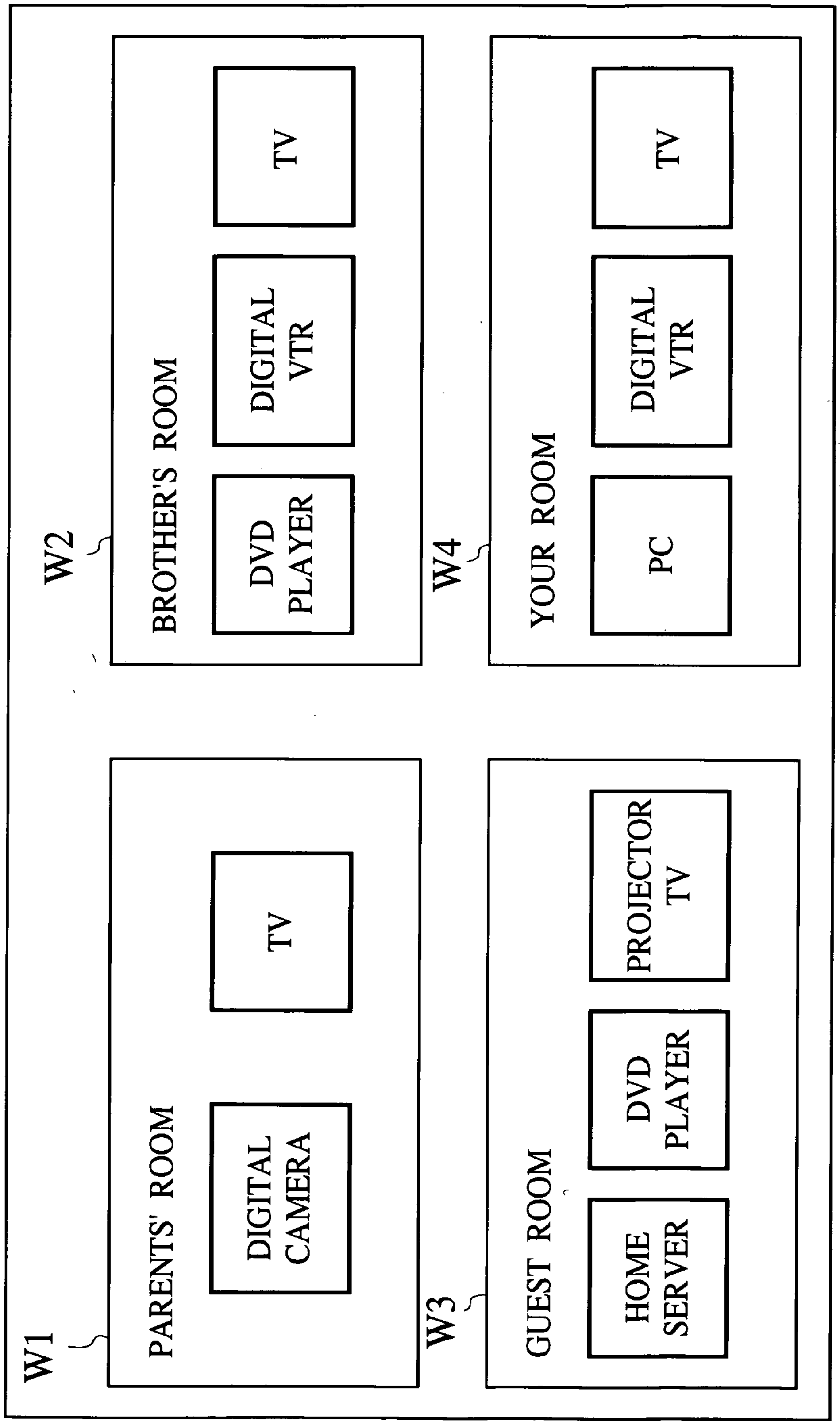

FIG.8

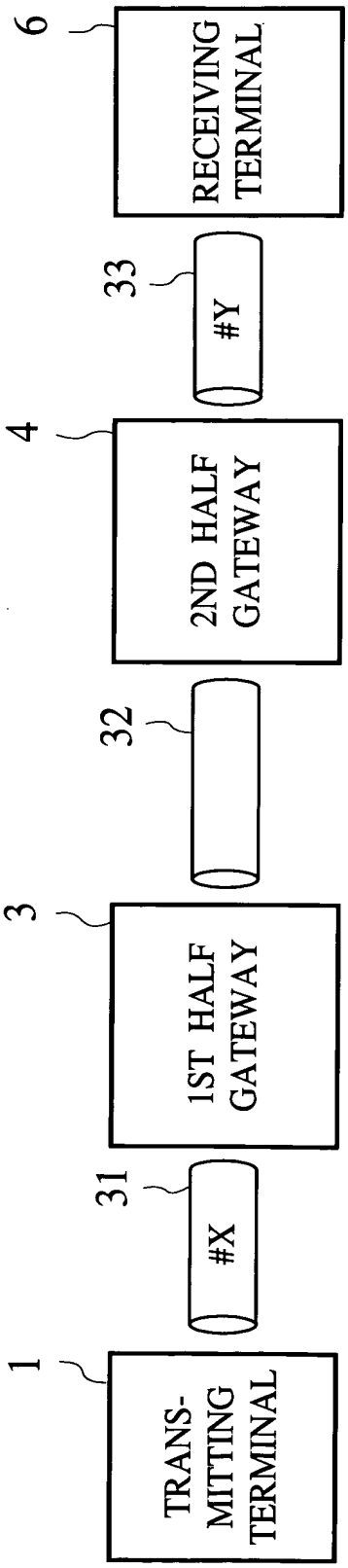
1
TRANS-MITTING TERMINAL
31
#X
3
1ST HALF GATEWAY
32
4
2ND HALF GATEWAY
33
#Y
6
RECEIVING TERMINAL

FIG.9

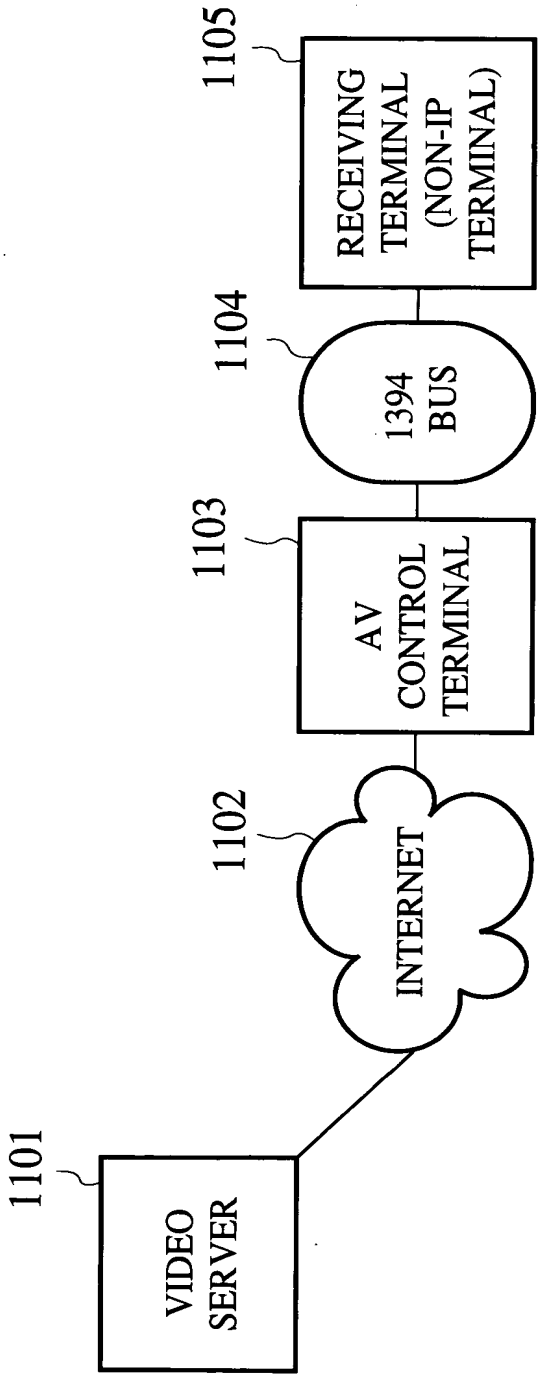

FIG.10

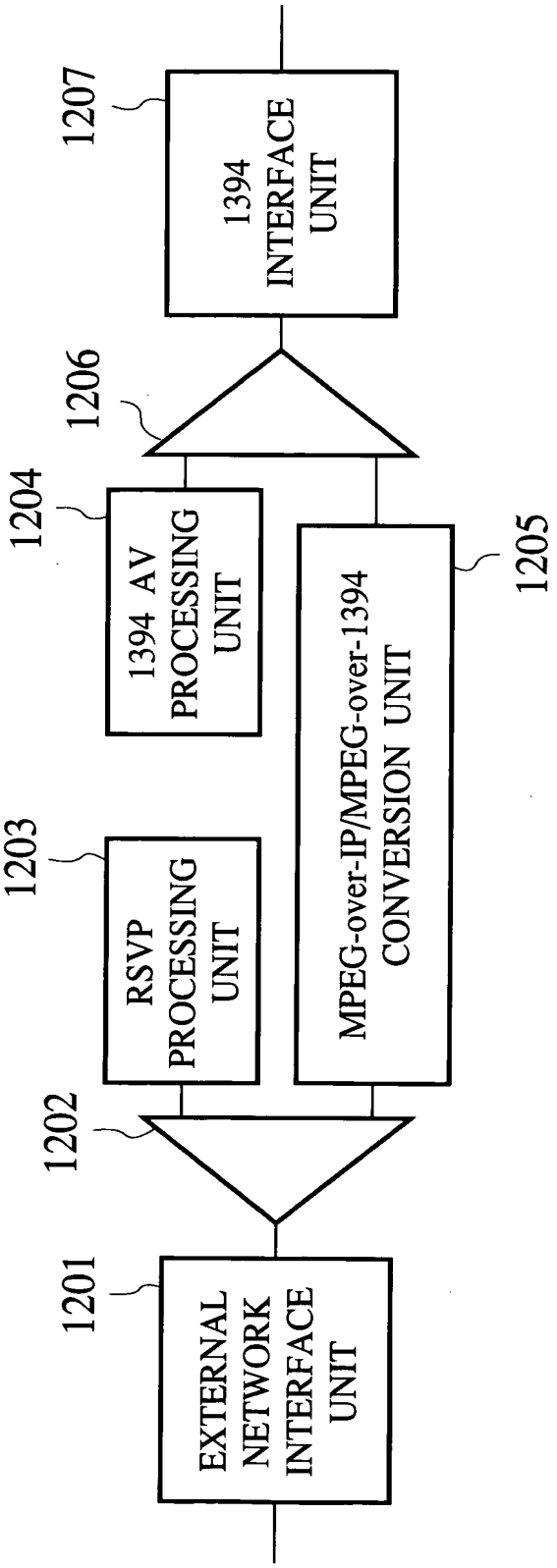
1207
1394 INTERFACE UNIT
1206
1204
1394 AV PROCESSING UNIT
1205
MPEG-over-IP/MPEG-over-1394 CONVERSION UNIT
1203
RSVP PROCESSING UNIT
1202
1201
EXTERNAL NETWORK INTERFACE UNIT

FIG.11

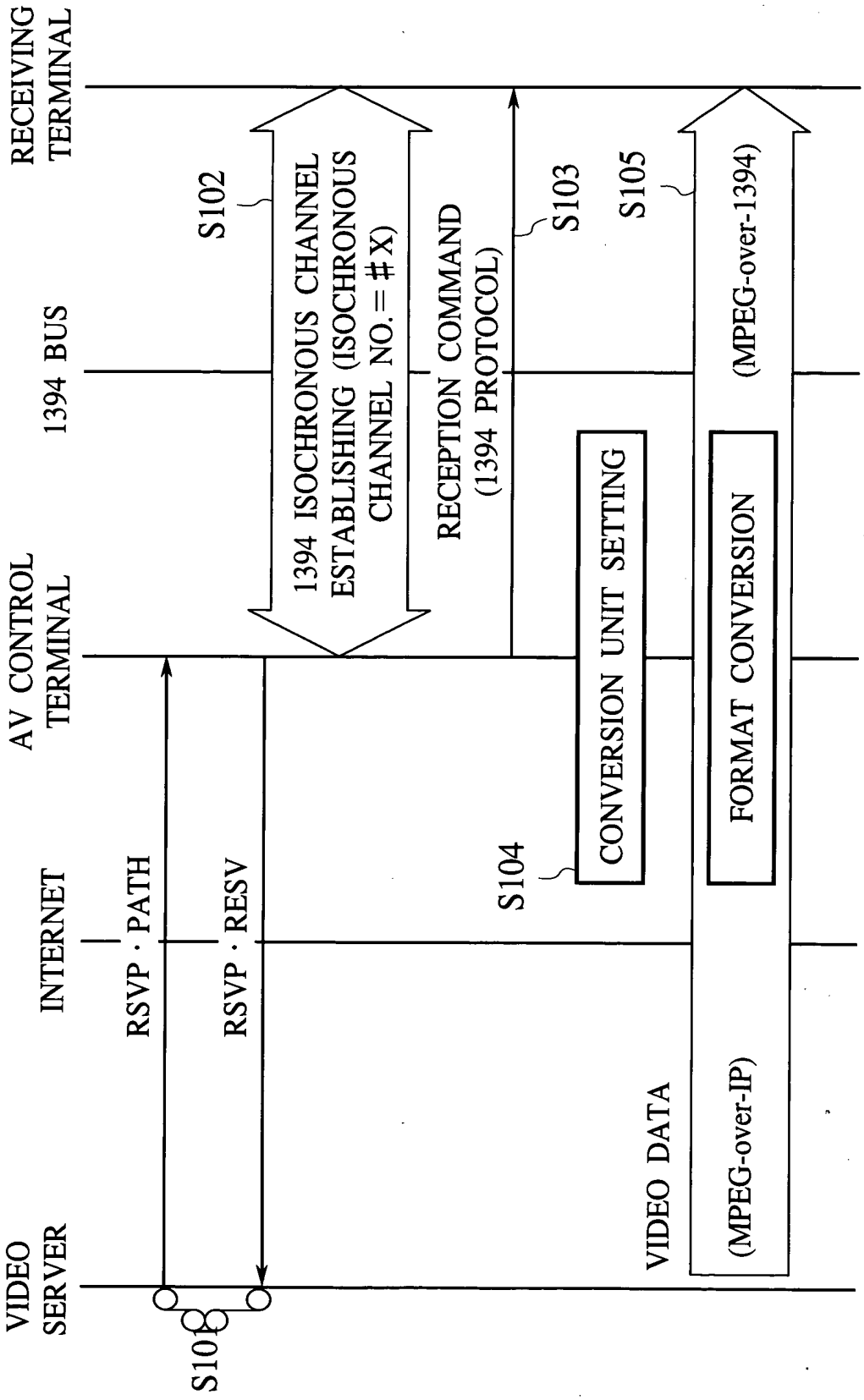
VIDEO SERVER
AV CONTROL TERMINAL
1394 BUS
RECEIVING TERMINAL
INTERNET
RSVP · PATH
RSVP · RESV
S101
S102
1394 ISOCHRONOUS CHANNEL ESTABLISHING (ISOCHRONOUS CHANNEL NO. = # X)
RECEPTION COMMAND (1394 PROTOCOL)
S103
S104
CONVERSION UNIT SETTING
S105
FORMAT CONVERSION
VIDEO DATA
(MPEG-over-IP)
(MPEG-over-1394)

FIG.12

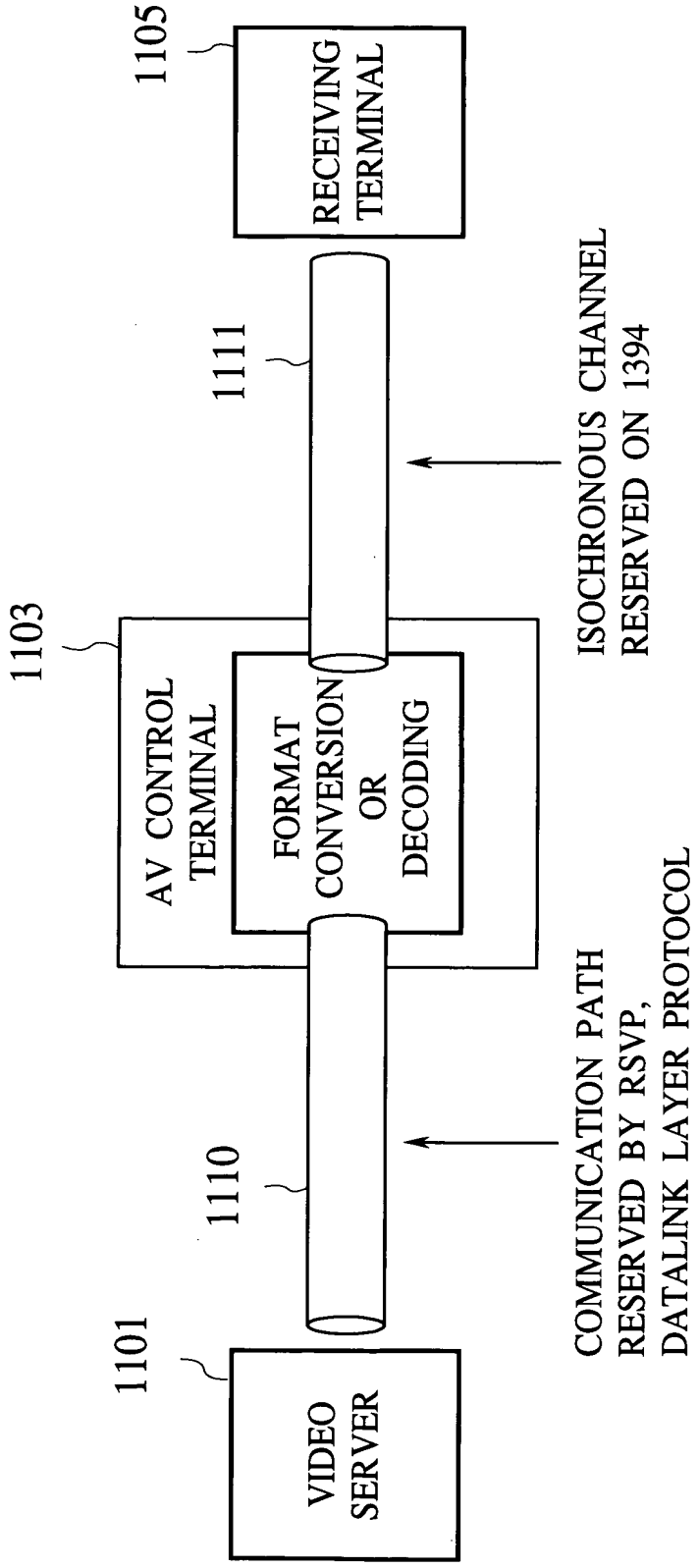

FIG.13

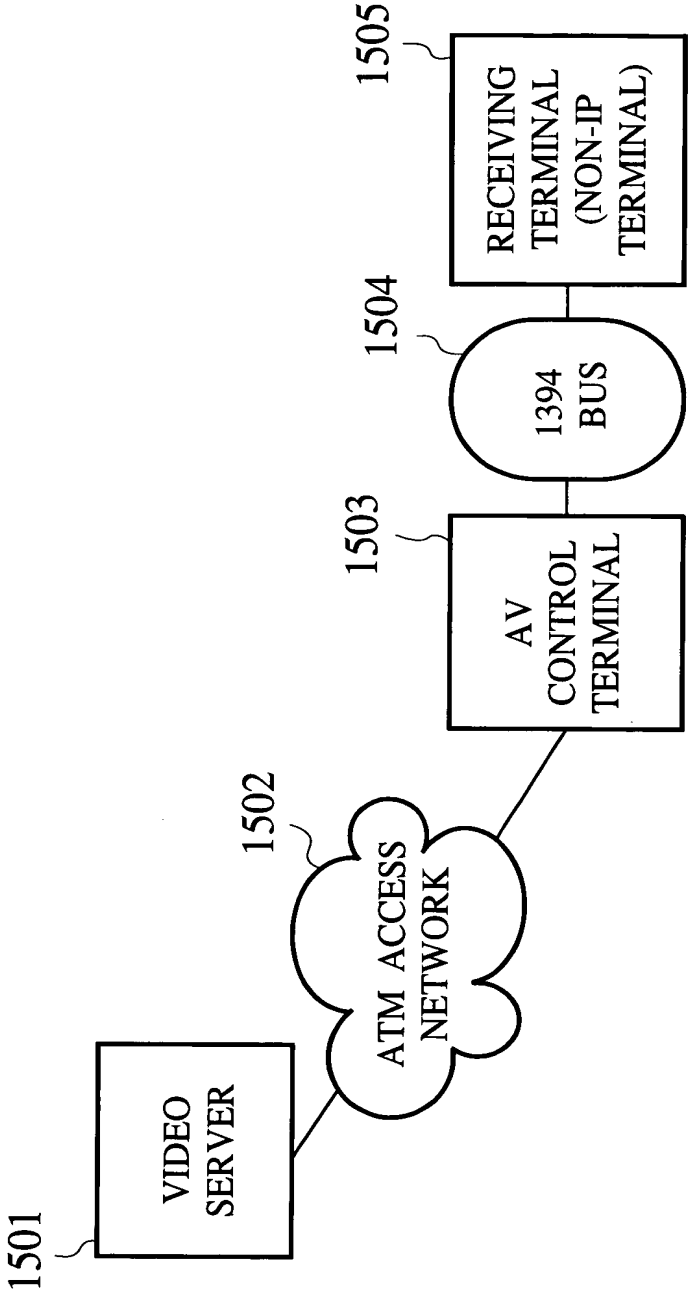

FIG.14

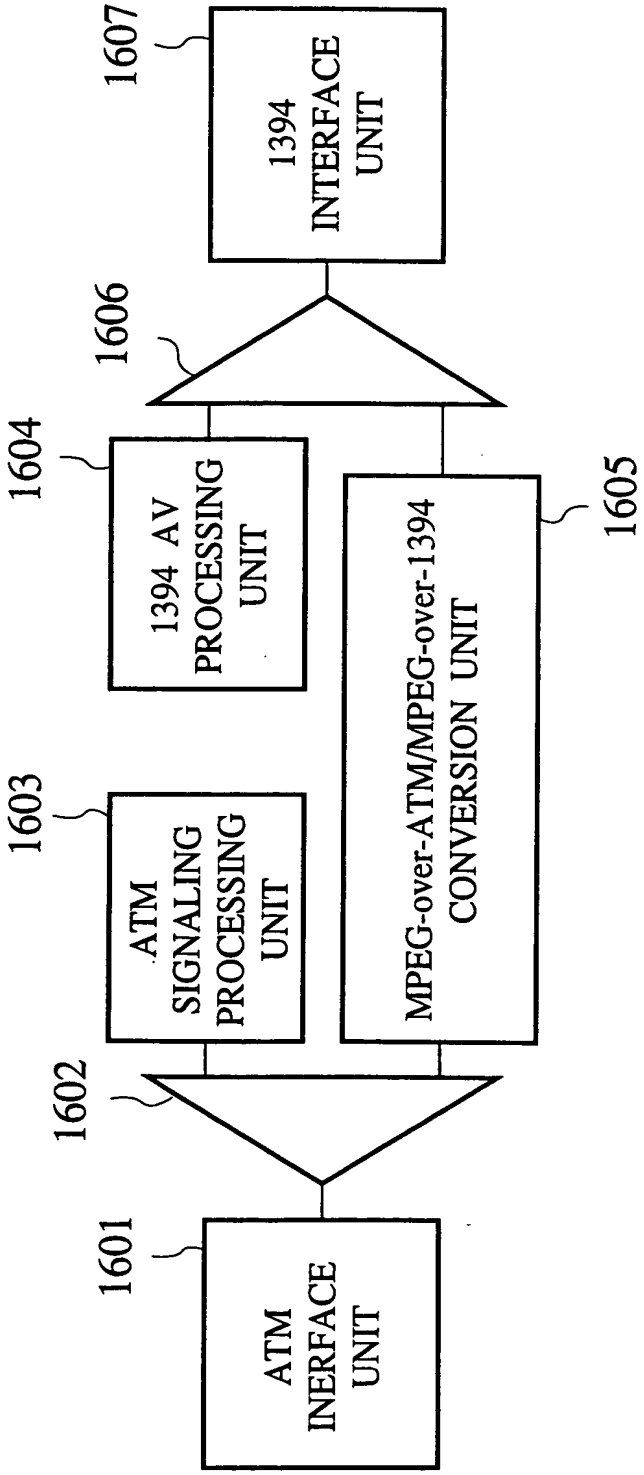

FIG.15

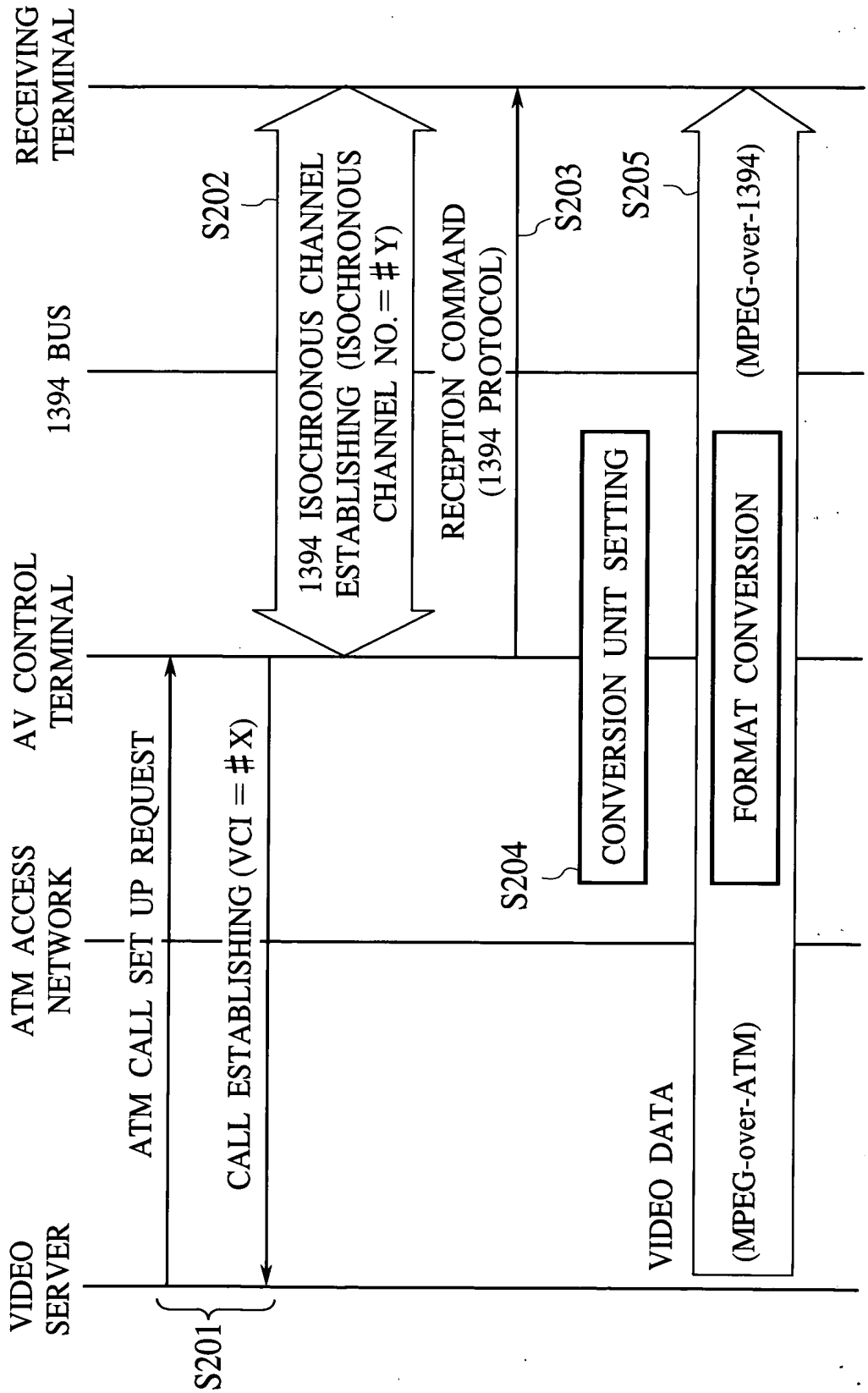

FIG.16

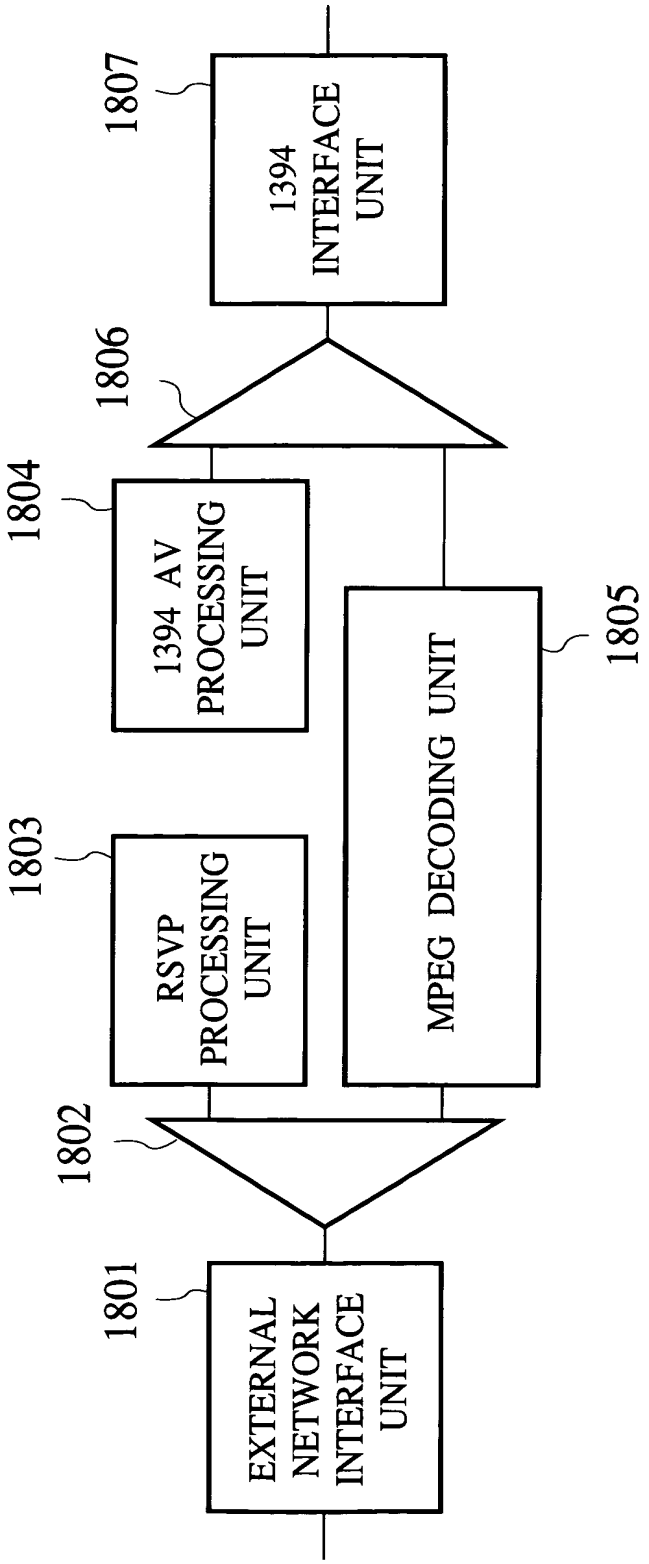

FIG.17

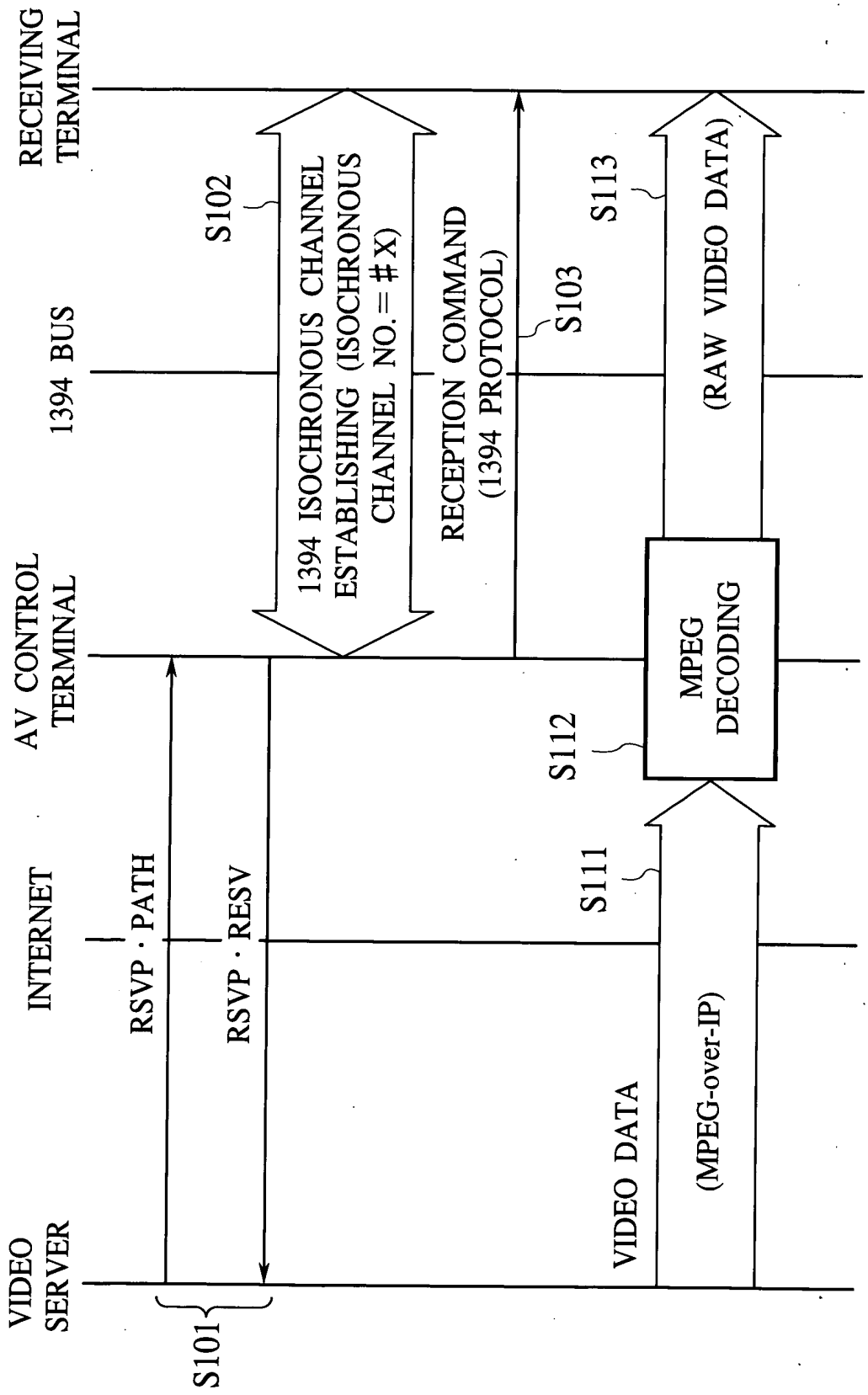

FIG.18

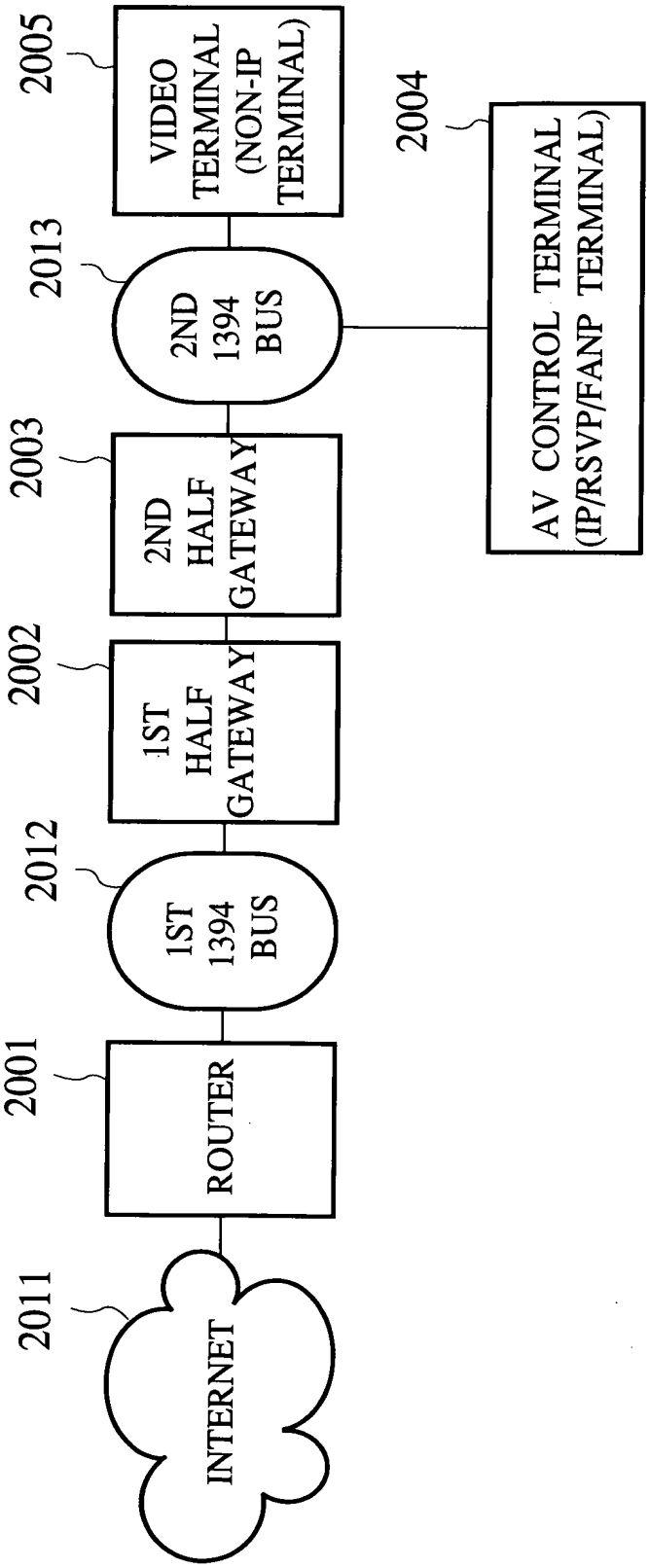

FIG.19

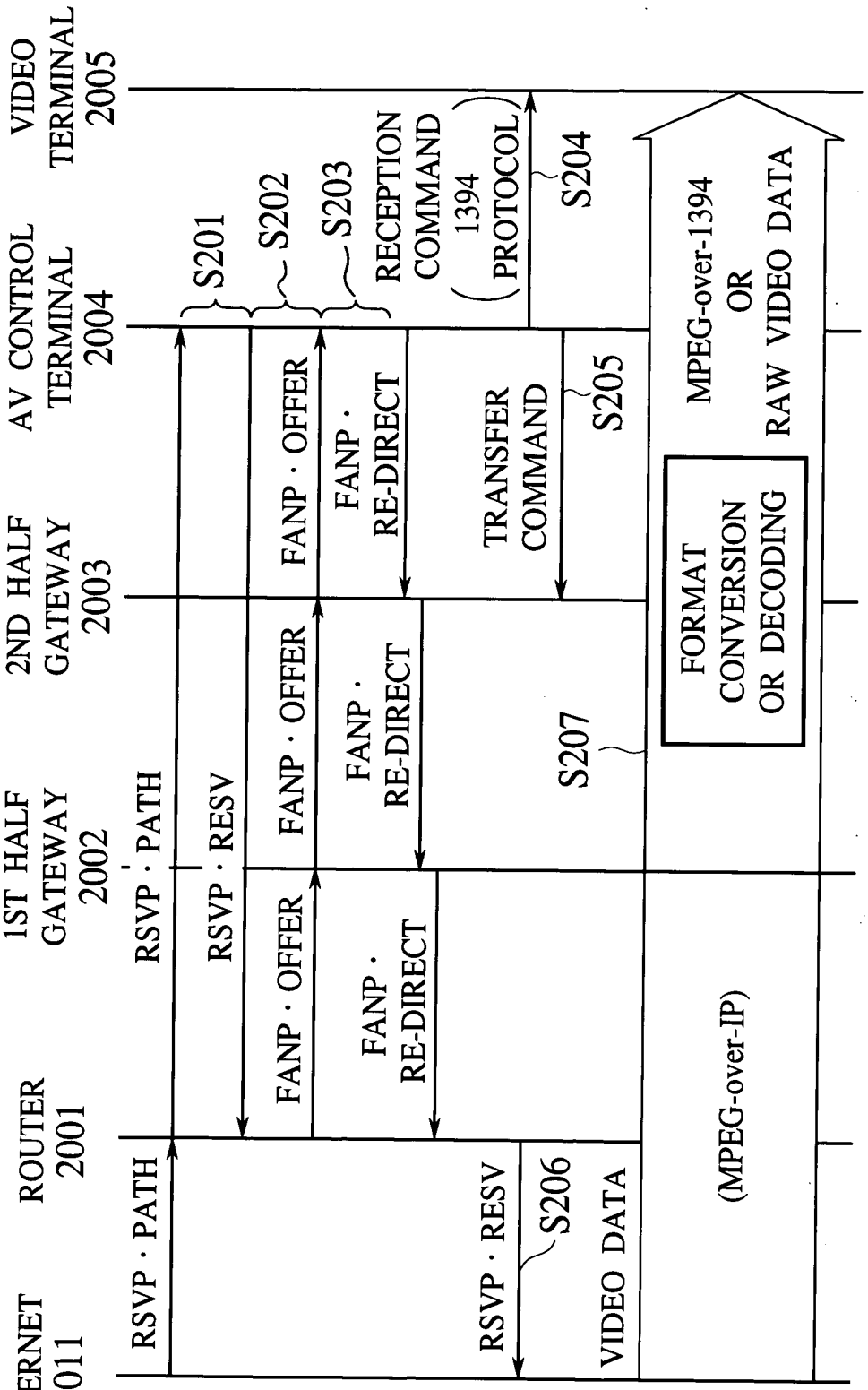

FIG.20

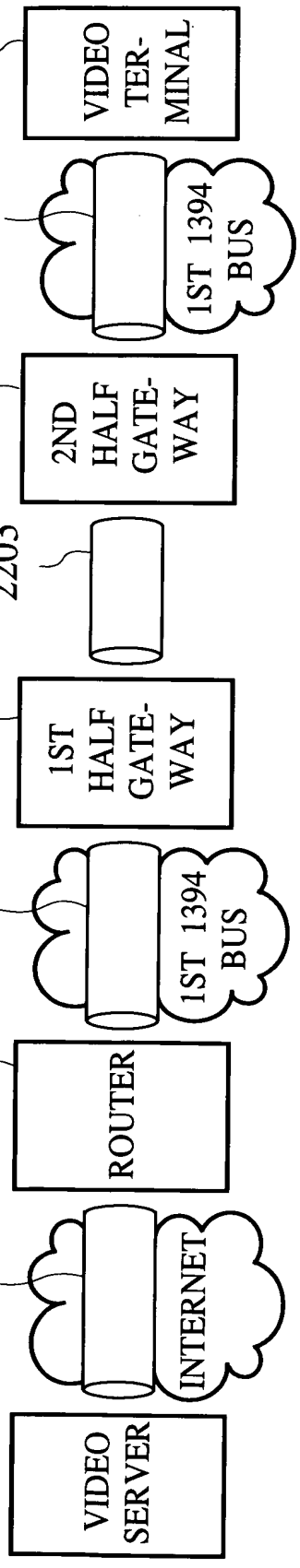

FIG.21

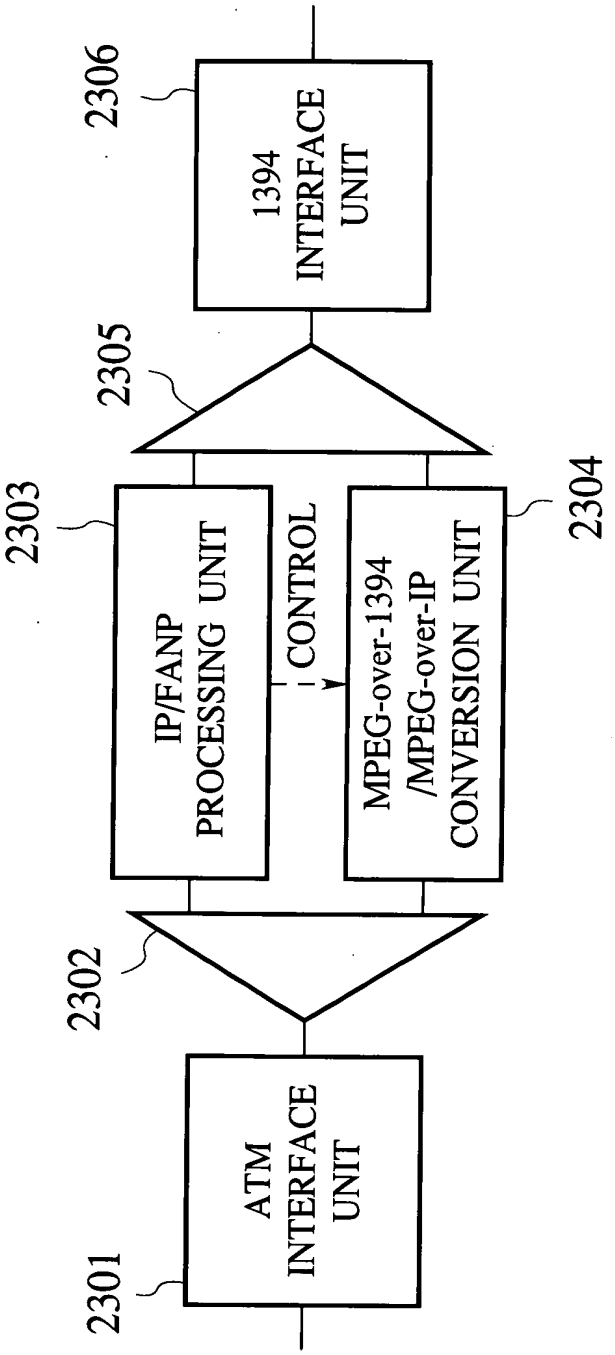

FIG.22

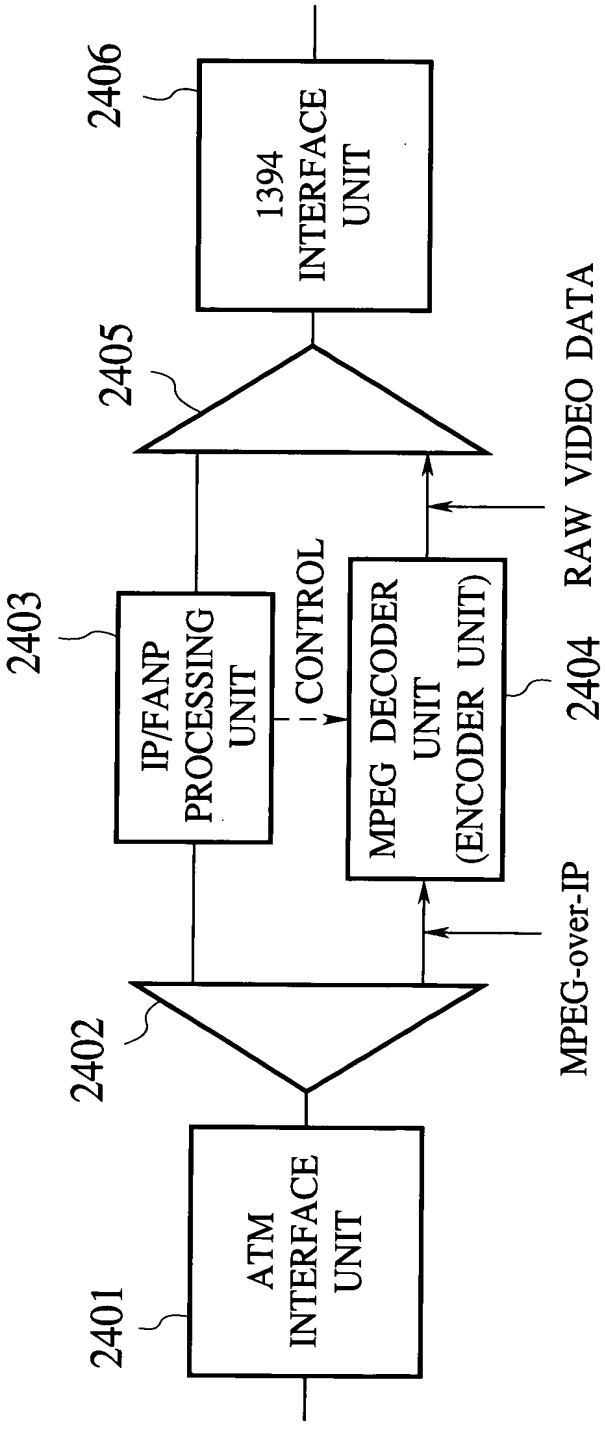

FIG.23

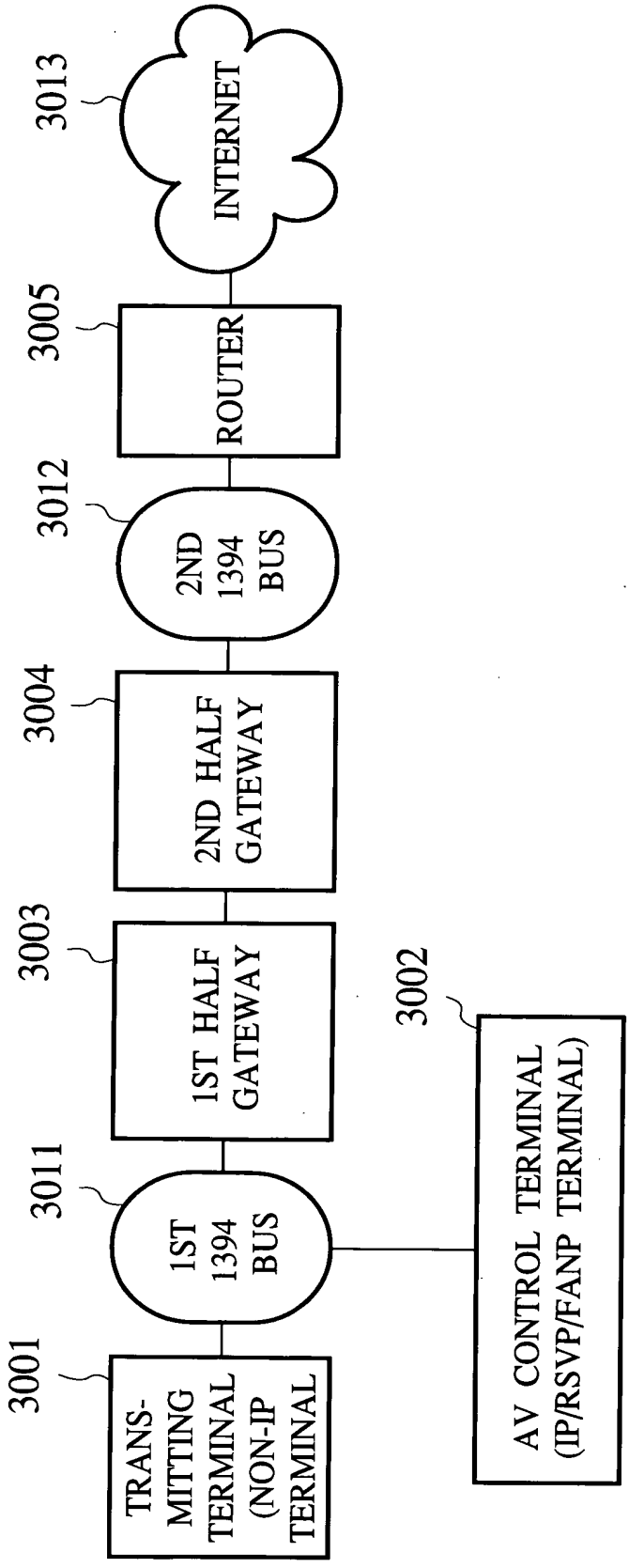

FIG.24

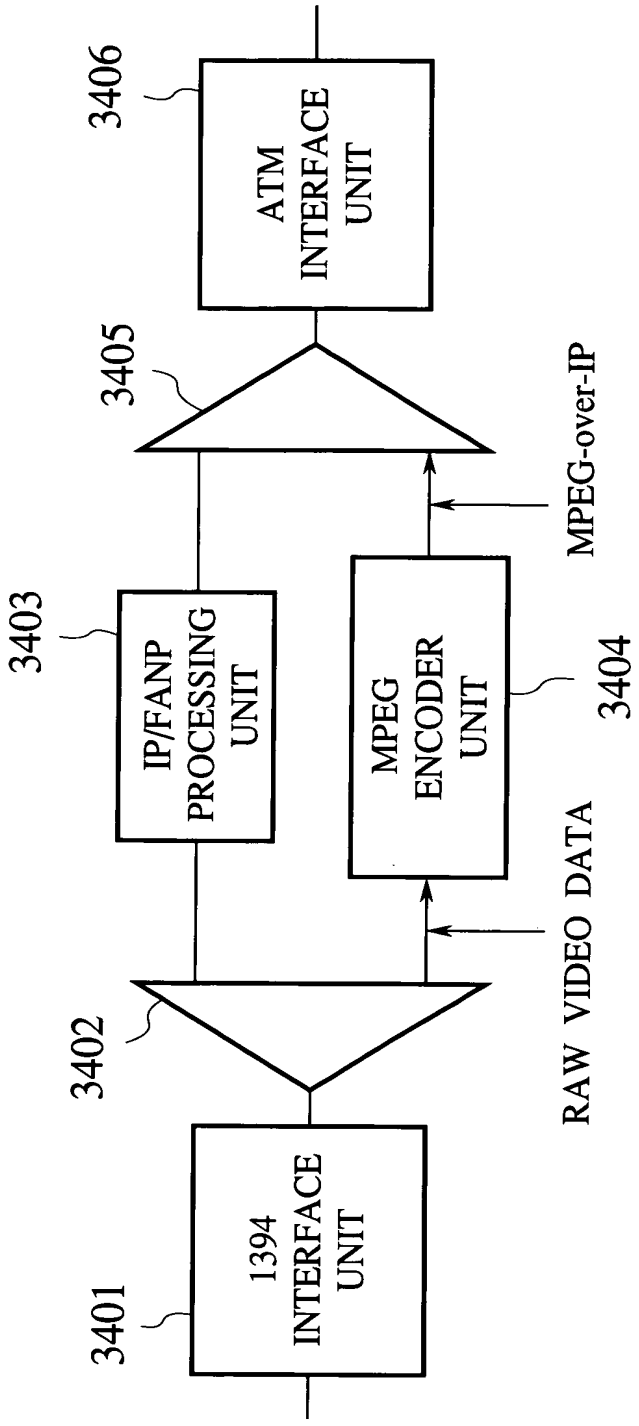
3406
ATM INTERFACE UNIT
3405
MPEG-over-IP
3403
IP/FANP PROCESSING UNIT
MPEG ENCODER UNIT
3404
RAW VIDEO DATA
3402
3401
1394 INTERFACE UNIT

FIG.25

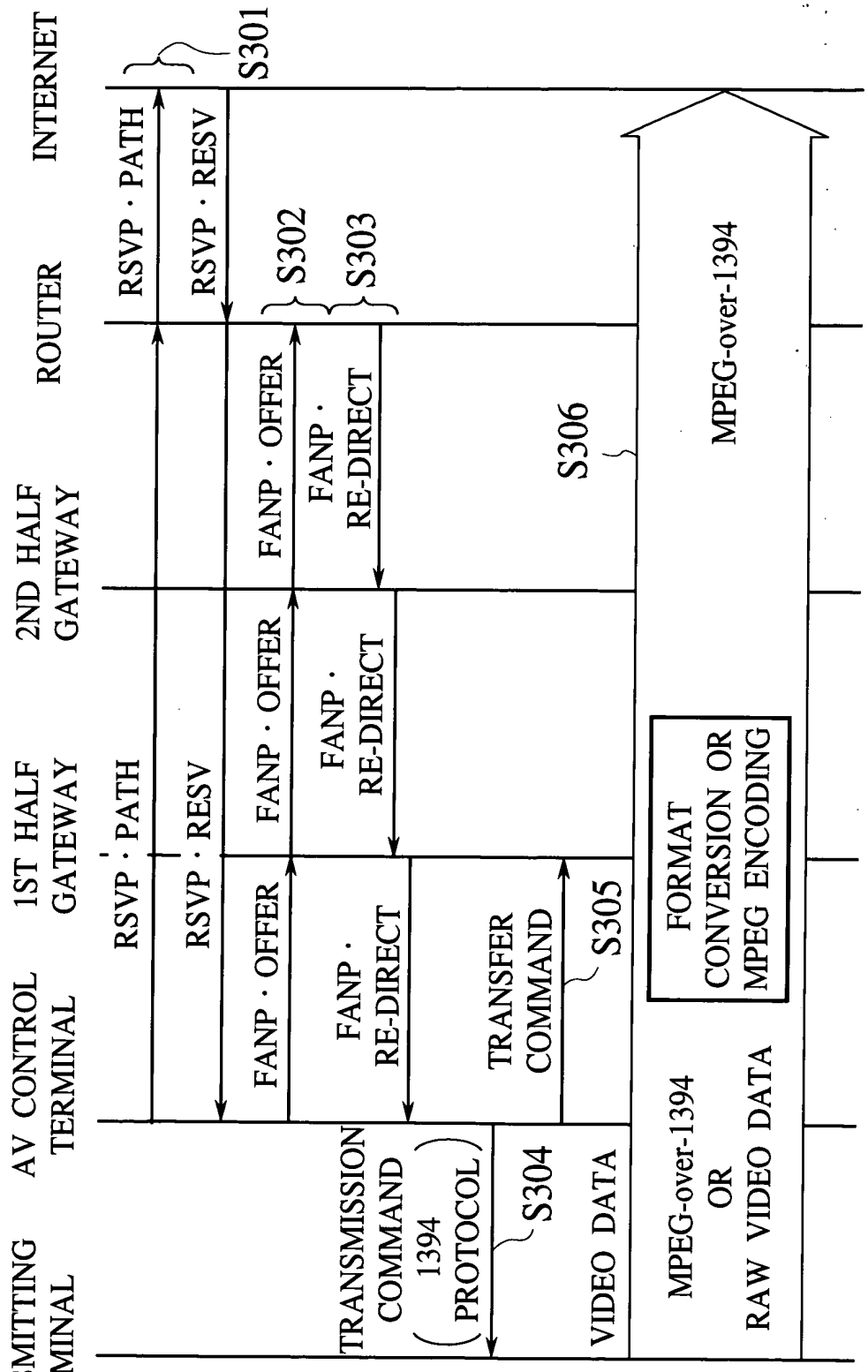

FIG.26

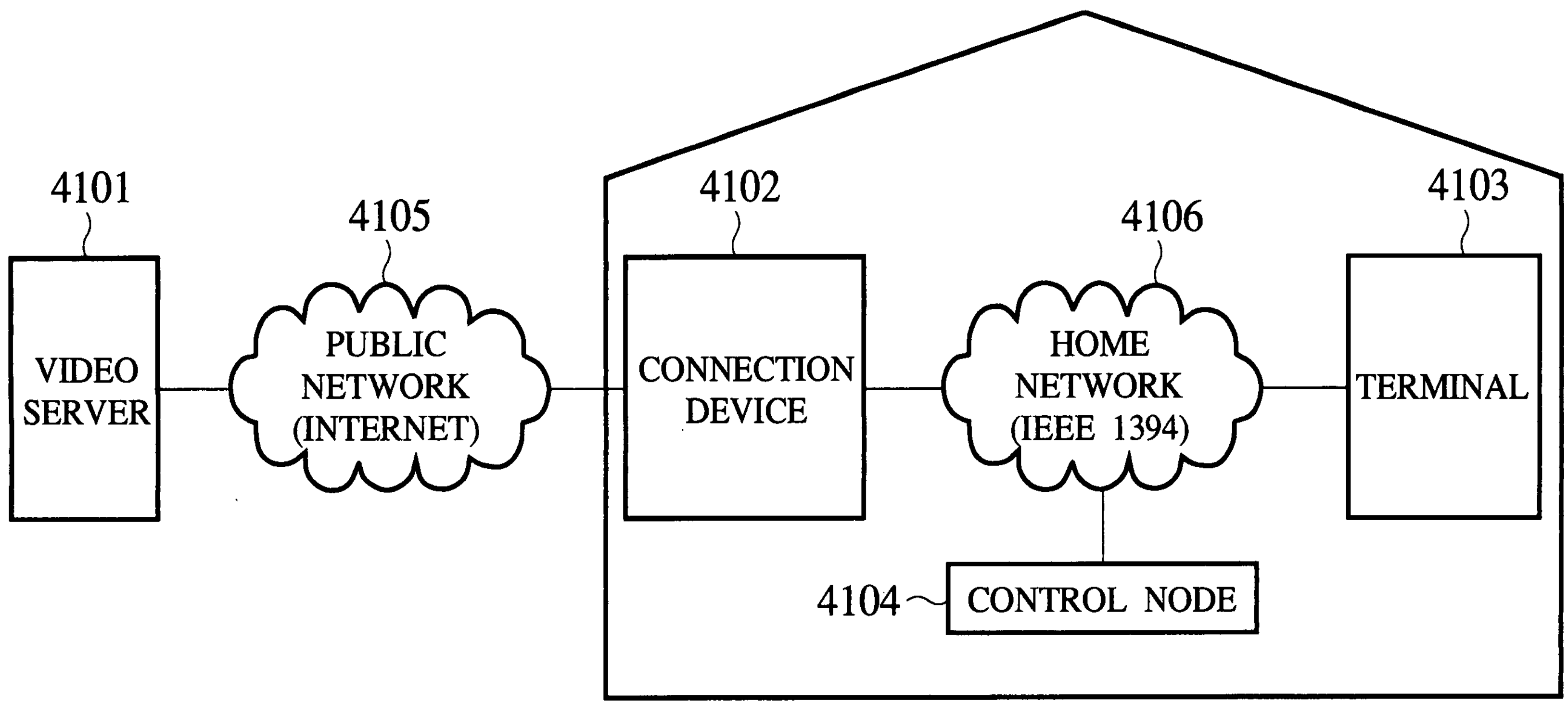
4101
VIDEO SERVER
4105
PUBLIC NETWORK (INTERNET)
4102
CONNECTION DEVICE
4106
HOME NETWORK (IEEE 1394)
4103
TERMINAL
4104
CONTROL NODE

FIG.27

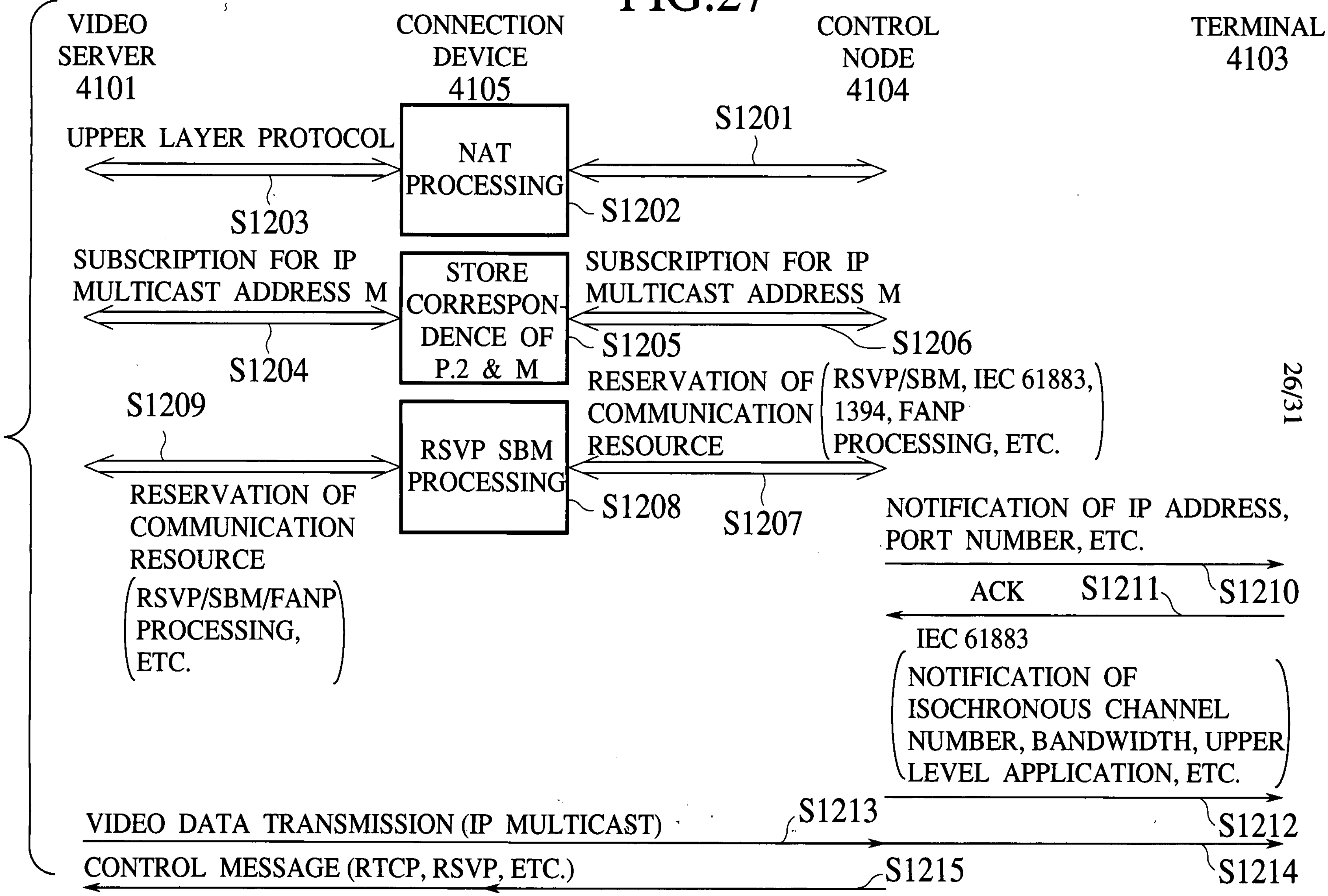

FIG.28

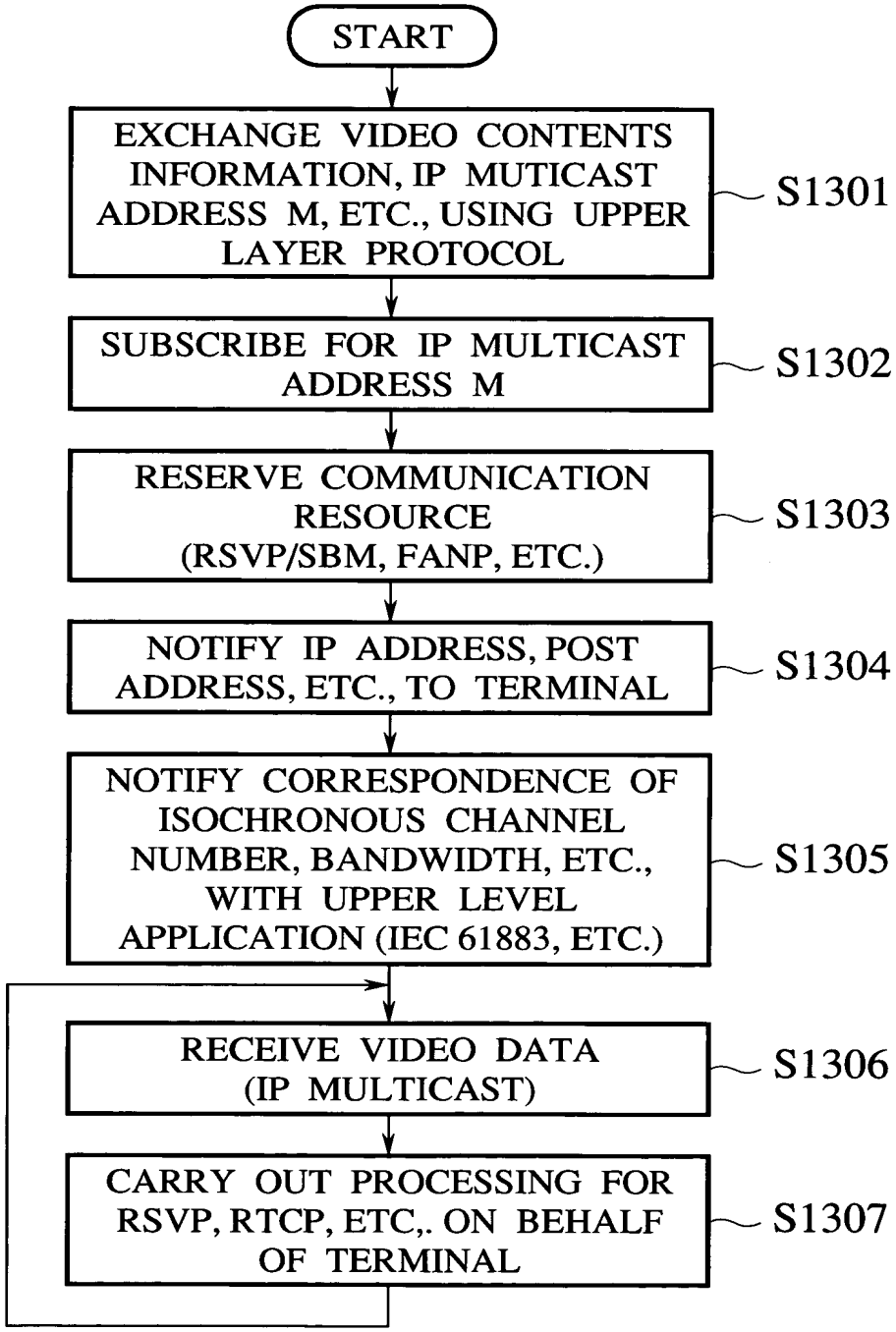

FIG.29

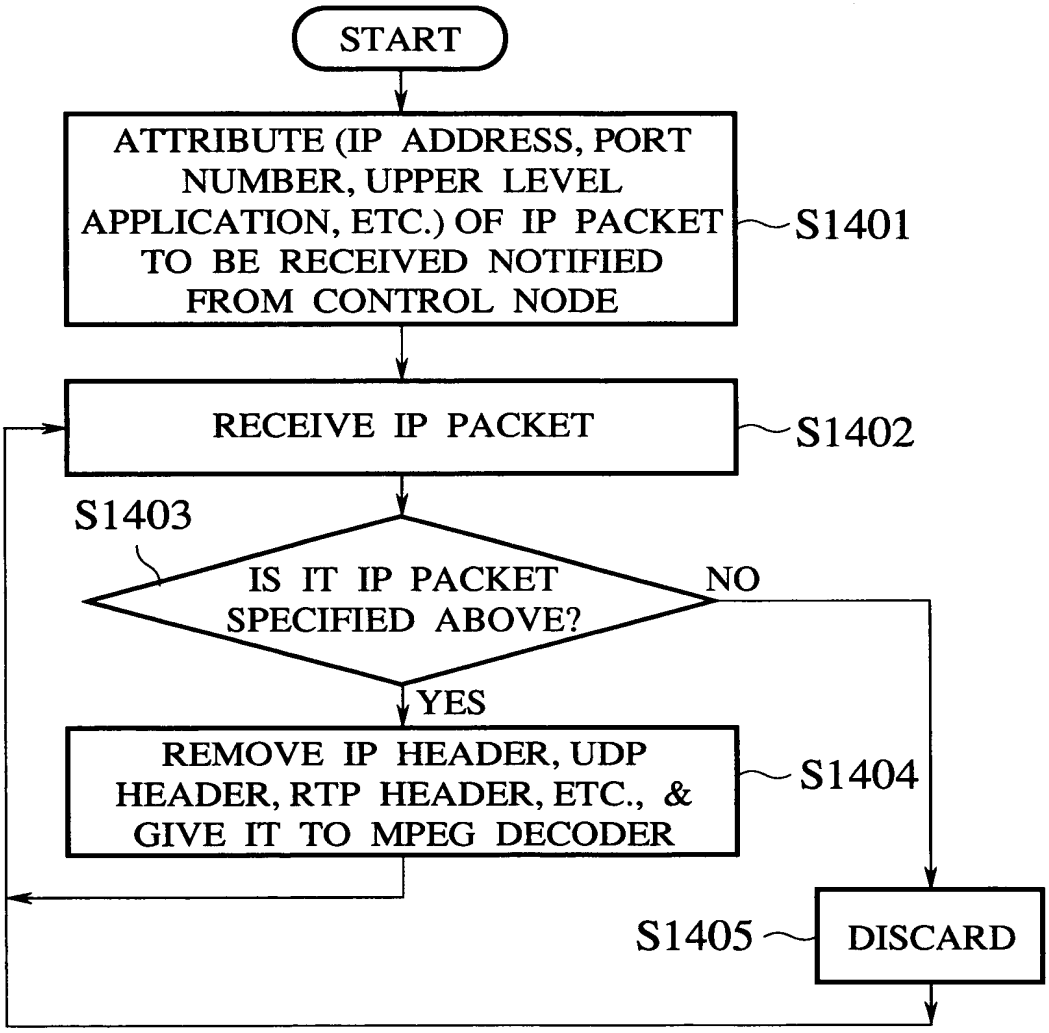

FIG.30

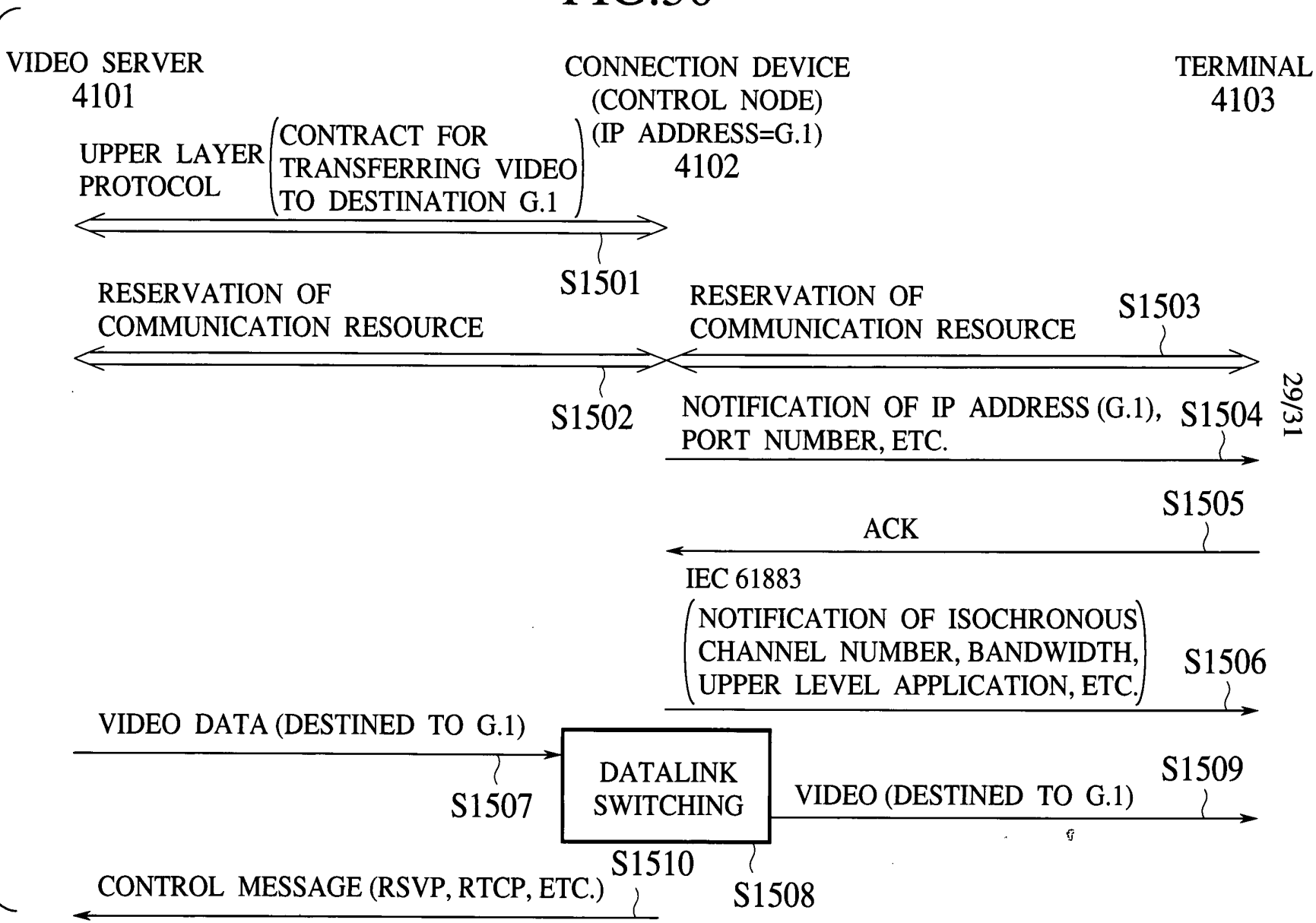
VIDEO SERVER
4101
CONNECTION DEVICE
(CONTROL NODE)
(IP ADDRESS=G.1)
4102
TERMINAL
4103
UPPER LAYER PROTOCOL
CONTRACT FOR TRANSFERRING VIDEO TO DESTINATION G.1
S1501
RESERVATION OF COMMUNICATION RESOURCE
S1502
RESERVATION OF COMMUNICATION RESOURCE
S1503
NOTIFICATION OF IP ADDRESS (G.1), PORT NUMBER, ETC.
S1504
ACK
S1505
IEC 61883
NOTIFICATION OF ISOCHRONOUS CHANNEL NUMBER, BANDWIDTH, UPPER LEVEL APPLICATION, ETC.
S1506
VIDEO DATA (DESTINED TO G.1)
S1507
DATALINK SWITCHING
S1508
VIDEO (DESTINED TO G.1)
S1509
CONTROL MESSAGE (RSVP, RTCP, ETC.)
S1510

FIG.31

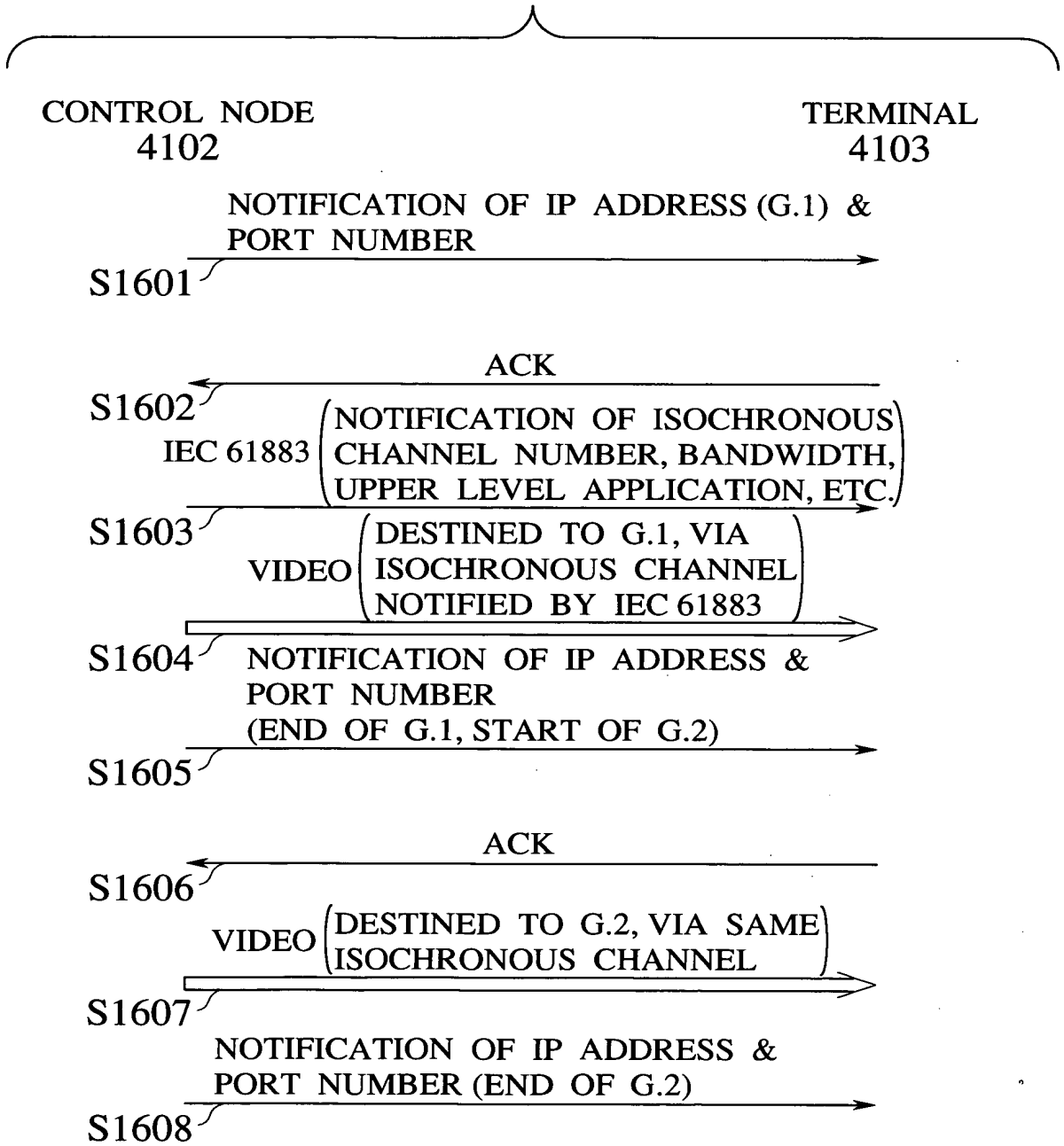

FIG.32